A-C44191

MEDICAL RESEARCH
COUNCIL LIBRARY
No 677 60

RAPPORT

DE

L'INSPECTEUR MÉDICAL

ET

BACTÉRIOLOGISTE,

POUR L'ANNÉE

1928

Présenté au Comite Sanitaire le 4 Octobre 1929.

LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE
LIBRARY
-7 SEP 1943

JERSEY:
J. T. BIGWOOD, LTD., STATES PRINTERS
13, BROAD STREET.

(200) 1929. —12—

Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

https://archive.org/details/b29500412

RAPPORT

DE

L'INSPECTEUR MÉDICAL

ET

BACTÉRIOLOGISTE,

POUR L'ANNÉE

1928

Présenté au Comite Sanitaire le 4 Octobre 1929.

JERSEY:
J. T. BIGWOOD, LTD., STATES PRINTERS
13, BROAD STREET.

(200) 1929. —12—

AU COMITÉ SANITAIRE.

L'An 1929, le 4e jour d'Octobre.

LE COMITÉ a reçu les Rapports de l'Inspecteur Médical et Bactériologiste et des deux Inspecteurs Sanitaire, pour l'année 1928, avec Tableaux y relatifs.

Et le Comité a ordonné que le Rapport de l'Inspecteur Médical, seulement, sera imprimé avec les Tableaux et les Relevés y annexés, pour être ensuite distribué aux Membres des Etats.

JOHN-ED. LE HUQUET,
Commis au Greffe.

LIBRARY
-7 SEP 1943

To the President and Members of the Sanitary Committee.

Gentlemen,

The Climatic conditions for the year have been favourable, the rainfall, slightly above the average, came at the right time and was followed by a Summer above the average. The sunshine record of 2081.4 hours, places Jersey first on the list. The importance of this can be understood, when one remembers that the island is a health resort. Our regaining our title of " Sunny Jersey " is in no small measure due to the purchase of an up-to-date recording instrument, similar to those used at other stations.

As regards Notifiable Infectious Diseases, the total of 96 is above the normal and of this number 38 were due to Scarlet Fever. This disease is always referred to as an importation and the first cases as usual appeared amongst visitors. The initial cases were mild and it is due to this fact that it spread, later cases have been more serious some being accompanied by complications.

No Conferences were attended officially, this is to be regretted as attendance is of value to the Public Health. When work is being done on a special subject, it is a vital necessity to be in touch with the most recent work and as a result, attendance at the Tuberculosis Conference had to be part of a busman's holiday.

I have the honour to be,
Gentlemen,
Your obedient Servant,
P. JANVRIN MARETT, Lt.-Col.,
M.O.H. States of Jersey.

JERSEY.

In accordance with established custom, only the essential details of population are given, full particulars being given every five years; this applies with equal force to the reports of the Sanitary Inspectors.

With an acreage of 28,717 acres, the density of the population is estimated at 1.74 persons per acre, the total estimated population being retained at 50,000.

ADMINISTRATION.

No Sanitary legislation has taken place during the year. However, it is pleasing to report that the local medical Societies have taken up the question of a Public Health Act, at the request of your Committee and in the course of the coming year, it is hoped that such an Act will be submitted to the Committee, by those Members of the Public who are in a position to know what legislative measures are necessary.

It has to be pointed out that the expenditure on the Public Health Service is getting less and less and whilst this is occurring, one must remember that the work is increasing and that we are doing without necessities.

The work has increased at least four fold, the index to this is seen in the Laboratory Work, in 1922, 892 specimens were examined, this year, 3,238 specimens were dealt with. If this figure indicated high water mark, the strain possibly could be taken, but there is every indication that the work is increasing and the necessity for increased personnel requires to be mentioned.

As regards necessities, so far back as 1908, plans were passed by the States for the building of a new

Isolation Hospital and the land was bought. The provision of a new Isolation Hospital is one of many necessities; a reasonably healthy laboratory is another.

The work done by our Voluntary Associations is deserving of all praise and they more than earn the grants which they now annually receive.

The work done by the Infant Welfare Association is reflected in the low infant mortality which at 55.26 per 1,000 births has created a new record.

The Island is now completely provided with District Nurses and the work done is not only to be recognised in the number of visits paid but in the incalculable relief afforded to the sick. Not long ago, district nurses were considered to be luxuries, now that we have them, they are recognised as necessities. All praise is due to those who worked to get the nurses and to the nurses who have done the pioneer work so nobly and only as true nurses would do. With Voluntary Societies doing such good work, it is only right to mention that there is still further work to be done.

We have our share of Chronic Chest complaints and we require a Voluntary Society to further this work. One would ask such a Society to cater for a Clinic where those who are unable to afford treatment could be dealt with and in connection with the Clinic we require a Sanatorium and one where "conditioned air" would be available. At the present time, all sufferers from chest complaints, when they can afford it, go to high altitudes where they can breathe pure dry air, in an institution with "conditioned air" this would be absolutely "on tap" and numbers could be benefitted, of those who at present can have no change.

The money for the Sewerage Schemes has been voted and work is being started in the First Tower District.

MILK SUPPLY.

A considerable amount of spade work has been carried out and the question of improving the purity of the supply is receiving the attention of the dairy farmer. At the present time, the unsatisfactory condition is universally recognised, by the fact that any mention of milk entails the use of an adjective. One hears of ' tested " milk, of "graded milk, " pasteurised " milk, where one should only hear of milk, which should imply a wholesome and a nutritious food stuff.

If we could supply this article " milk," we, who are blessed with cattle free from bovine tuberculosis, could export it in competition with those diaries in England, which at considerable trouble and expense are able to sell " certified " milk.

Before we can do this, we must be able to transport our milk. On the mail boats it is recognised that our milk, rarely keeps good for the journey across, whereas, milk brought over from the other side, is still good even after being kept over the week-end.

Cattle suffer from diseases, just as much as do human beings and the pith of this is that many of these diseases are communicable to man, through the milk supply. The only way in which this can be lessened is by making use of Science and carrying out investigations into each disease. All cows on dairy farms should be required to have a clean bill of health especially after each calving and this means inspections and investigations. It looks as if money were required to be spent lavishly, money requires to be spent but the returns would be lavish in the increased supply. A healthy cow will yield more and better milk than will an ailing animal.

It is hoped that the Davis Agricultural Farm will be able to help to attain this object.

The importance of healthy cattle will be appreciated when it is stated that many of the diseases of cattle are infectious and there are countries, which are wide awake to this fact, and will pay handsomely for cattle with a clean bill of health, whilst they will have nothing to do with infected animals.

FOODSTUFFS.

The usual routine work has been carried out as regards the supervision of foodstuffs.

Boric Acid was found in one sample of milk and in samples of Margarine.

The Boric in the Margarine was a flagrant case, all dealers in Margarine had been warned and one firm persisted. It is well known that the keeping properties of Margarine are far superior to those of butter and for margarine to require antiseptics for its preservation shows that it is made from inferior materials.

Samples of milk were found to have been tampered with, one vendor was dealt with for several samples taken on the same day all found to contain added water and one deficient in cream ; another vendor for added water, in both instances the culprits were farmers.

WATER SUPPLIES.

There has been a rise in the number of water samples examined during the year, the number being 72. The reason for this, is partly due to the fact that country residents are taking more interest in the quality of their well waters.

Only 2 cases of Paratyphoid B. Fever were notified during the year and one of these was contracted on a visit to London where there was an outbreak. In an island with a rainfall of over 30 inches, there should be no shortage of water, that a shortage of clean available water can occur has been experienced.

This is due to there being no laws to prevent the pollution of streams, attention has been drawn to this in previous annual reports, notably that of 1925. Some people have the idea that the M.O.H. and the Sanitary Inspectors should cause these sources of pollution to cease, the task is on a par with the cleansing of the Augean Stables. If it could be pointed out to offenders that there was a law protecting streams and penalties for offences, then the task could be started. As regards specific examples the St. Peter Valley Stream, the work should be started at the source of the Stream and would be fairly possible up to the Elms, where nearby there is a mill pond, from this pond, the amount of water allowed to the Waterworks would require piping. At present there is no Law but further the riparian owner has time honoured rights of pollution ; he also has every right to build wherever he wishes, a specific instance is that of pigstys which were recommended to be built on a definite site, as far removed from a stream as possible, the owner determined to build on the bank of the stream and did so ; that he led the sewage from his styes to the centre of his field might have been all right, except that having done this, he proceeded to divert the stream on his property with the result that the overflow from the pigstyes discharged into the stream.

The question of a safe water supply is so intimately connected with Health that one hopes that it will be dealt with. One looks forward to the time when the water supply will be State controlled and then the question will be a wider one than it is at present. When and if the State assume control, before anything is done, expert advice will be necessary and one which will automatically take into consideration the Geological formation of the Island.

Owing to the fact that a death was certified as due to lead poisoning, the consequent holding of an inquest, resulted in this cause of death being well ventilated in the local papers, with the satisfactory result that many more lead pipes have been removed from wells than have been removed for a considerable time. Chronic lead poisoning gives rise to a great deal of invalidism and frequently simulates Chronic Rheumatism.

DRAINAGE, SEWERAGE AND SEWAGE DISPOSAL.

It is pleasing to be able to write that the work on the sewerage extensions has been started ; the First Tower Section being given preference. It is hoped that the work will be pushed forward so that in the next annual report, it may be placed on record that all three sections have been satisfactorily completed.

DISPOSAL OF REFUSE.

This Section is always referred to, as one day it may be included in the duties of the Sanitary Authority. Side issues frequently arise and when they do. they are referred to the proper local authority. During the year, the question of the refuse from a country parish being dumped into water in a disused quarry, gave rise to a nuisance.

It is lucky that most of these quarries drain naturally and as a result, the refuse in them does not decompose so offensively. Undoubtedley, the disposal of refuse by burning will have to be undertaken some day.

HOUSING ACCOMMODATION.

This question can only be improved by the expenditure of money on building. Money is annually wasted on temporary repairs, which would be better spent on new buildings.

It is deplorable to see new dwellings rising without any thought of the human needs of natural lighting and ventilation, the sole reason for this is conservatism or should it be called ignorance ; we want to remember the words of the song " The best things in Life are free."

VITAL STATISTICS FOR 1928.

The figures issued by the Ministry of Health for 1928, for purposes of comparison of Vital Statistics are as follows :—

Area.	Birth Rate.	Death Rate.	Infant Mortality.
England and Wales...	**16.9**	**11.7**	**65**
107 County Boroughs and great Towns including London...	16.9	11.6	70
155 smaller Towns ...	16.7	10.6	59
London on 1927 population	15 9	11.6	67
Jersey	15.2	14.0	52.26

The Death rate of 14 for Jersey is offset by the fact that of the deaths 55.714% were over 65 years of age.

ZYMOTIC DISEASES.

The following are the Zymotic Deaths registered during 1928.

Measles	—
Scarlet Fever	—
Whooping Cough.........	2
Diphtheria	—
Enteric Fever Group ...	—
Diarrhœa	12

giving a Zymotic death rate of .28 per 1,000 inhabitants.

Of the Diarrhœas only 7 occurred in infants.

NOTIFIABLE DISEASES.

Ninety-six cases were notified, of these 53 occurred in the Parish of St. Helier and 43 in the Country Parishes, the ratios being respectively, 2 and 1.8 per 1000.

Scarlet Fever. 38 cases, this is the largest number notified for some years, towards the end of the year, the type of case assumed severer symptoms. Twenty-three of the thirty-eight cases were in the age period 5–15 and the numbers were equally divided between Town and Country.

Diphtheria. There were 7 cases with no deaths, this is the lowest number recorded. Four cases occurred in one family.

Enteric Fever Group. Two cases, one of which was contracted in London, both were Paratyphoid B.

Tuberculosis. 45 cases were notified and 47 deaths were registered. Of the deaths 37 were stated to be due to Tubercle of Lungs, 5 to Tuberculous Meningitis and 5 to other forms of Tuberculosis.

Of the 37 deaths registered as T.B. Lungs, 17 were not notified and nothing was known of them till the deaths were registered. The remaining 20 had had sputum examinations carried out, 17 had received a certain amount of treatment, 3 prior to 1928. Of the 14 who received treatment during the year, only 5 had had a complete course.

During the year, 304 cases of Chronic Lung disease were examined, of these 62 were found to be negative to T.B. and to Blastomycosis, leaving 242 cases due to these two infections.

The following table gives the relative incidences for 1927 and for 1928.

	1928—242 cases.		1927—200 cases	
T.B. & Blastomycosis ...	66 cases	82 cases	50 cases	80 cases
T.B. only	16 ,,		30 ,,	
Blastomycosis.	160 ,,		120 ,,	

Comparing the two years, it is noticeable that the number of T.B. infections dealt with is practically the same ; the number of Blastomycosis infections has risen by one third. The number of T.B. only has been reduced, the reason in both cases being improved methods in culturing Blastomycetes.

Among the 82 cases under treatment in 1928, there were 14 deaths and of these only 5 had had treatment for over three months.

There is an urgent necessity for the formation of a Voluntary Association for the treatment of Chronic Diseases of the Chest, the number of patients seeking help is on the increase. Such a Voluntary Association should consist of (1) a Clinic where patients could be treated as Out-patients and (2) a Preventorium for in-patients, this Institution to be equipped with " conditioned air."

LABARATORY.

Out of a total of 3,238 specimens, 2,514 were for examinations of Sputum, the tabulated results of this work are given under the heading of Tuberculosis.

The increase in positive Blastomycete infections in 1928, as seen in the mixed and in the pure Blastomycete, is due to the use of Beer Wort for culture purposes and also to the larger number of patients who have been dealt with. With the amount of work which is being undertaken on Blastomycete infections of the Lungs, to repeat statements of former years, is done in order to emphasise the pathogenic importance of these infections. Monilias, which preponderate, give rise to clinical conditions, from Chronic Bronchitis to conditions simulating Tubercle of Lung. Where a lung is infected with an organism, it is more susceptible to infection with Tubercle, if brought into contact with that organism, the invading organisms living in true Symbiosis.

Under these conditions differential diagnosis is essential and consequent on it is differential treatment.

Where the double infection occurs, treatment is first directed to the Monilia which is the more amenable ; on the disappearance of this, treatment of the Tubercle infection is proceeded with.

Coincident with this line of treatment the annual deaths from all forms of Tuberculosis has fallen from 86 deaths in 1922 to 47 deaths in 1928, corresponding to a fall in death rate from 1.5 to 9.4 per 1000.

Work on Monilia infections of cattle has been continued and preventive inoculations have been carried out.

Serological examinations of Vaccine treated cattle have shewn definite agglutinations up to a dilution of 1 in 160. Culture of milk from these animals has also, so far resulted in the substitution of negative results, where previously cultures were positive.

All cases of mammitis, where cultures have been made from the milk, have shewn the presence of Monilia and Streptococci. Work carried out on Mammitis has incriminated the Streptococci, but is only successful when whole milk has been inoculated, similar work done in Norway, using Streptococci has negatived their importance as causal agents.

It is possible that Monilia is overlooked owing to its slow growth on ordinary laboratory media.

Further work has been done on the presence of Monilias giving rise to Granulomata, Monilias give rise to Cholesterol.

There is a Cancer School which has done a considerable amount of work on the Cholesterol content of the body which is said to be raised in Cancer patients.

Bio-chemists have shewn that there is an increase in the rate of growth of Carcinomas, when emulsified cholesterol is directly injected into the tumours.

Wacker has shewn that the cholesterol content of fatty deposits in the subcutaneous tissues and mesenteries of persons who are afflicted with carcinoma, averages no less than 66% greater than the cholesterol content of the fatty deposits in normal persons.

The same investigator found a similar increase in the cholesterol content of reserve fats in very aged persons and in persons suffering from Tuberculosis or Diabetes. In previous reports, reference has been made to the presence of Monilias in the three above mentioned diseases.

In recent years, two forms of treatment have been brought forward as important to the health, the one is the use of Iodides and of Iodine both for man and for his domestic animals. The other is the use of yeast and extracts of yeast, may this latter not act as an oral vaccine.

It has been found that in the treatment of Diabetes, with Insulin, the amount of Sugar passed, can be materially lessened by giving yeast extracts, the dose of Insulin remaining unchanged.

P. JANVRIN MARETT, Lt.-Col.,
M.O.H. States' Jersey.

TABLE I.

VITAL STATISTICS OF THE ISLAND OF JERSEY FOR THE YEAR 1928.

Estimated Population.	Births.		Deaths.		Death Rate for		Deaths under 1 year.		Marriages.	
	Number	Rate	Number	Rate	T.B.	Cancer	Number	Rate for 1000 Births	Number	Rate
50,000........................	760	15.2	700	14	Lungs —.74 All forms—.94	1.72	42	55.26	348	6.96

TABLE II.

PERCENTAGE OF DEATHS AT DIFFERENT AGE GROUPS 1928.

	All ages	Under 1 year	1–5	5–15	15–25	25–45	45–65	65 & up
Total deaths	700	42	10	9	18	74	157	390
Rate per cent.	99.997	6	1.428	1.285	2.571	10.571	22.428	55.714

TABLE III.

TABLE OF INFECTIOUS DISEASES NOTIFIED DURING 1928.

	Number of Cases notified at ages in years.								Total Cases notified in each Parish.											
	At all Ages.	under 1	1–5	5–15	15–25	25–45	45–65	65–& up	St. Helier	St. Mary	St. Martin	St. Lawrence	St. John	Grouville	St. Peter	St. Ouen	St. Saviour	St. Brelade	St. Clement	Trinity
Diphtheria	7	—	2	3	—	2	—	—	3	—	—	—	—	—	—	—	—	—	4	—
Scarlet Fever............	38	—	4	23	7	4	—	—	19	—	5	2	1	1	2	4	—	3	1	—
T.B. Lungs...............	45	—	—	—	10	27	7	1	28	1	1	—	1	1	1	3	5	3	1	—
Typhoid Group	2	—	—	—	—	1	1	—	—	—	—	—	—	—	1	—	—	—	1	—
Pneumonia	2	1	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—
Ophthalmia Neo.	1	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	1	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Totals	96	2	6	26	18	34	9	1	53	1	6	2	2	2	4	7	5	6	8	—

TABLE IV.

CAUSES OF AND AGES AT DEATH DURING THE YEAR 1928.—ISLAND OF JERSEY.

Diseases.	All Ages	Under 1	1–2	2–5	5–15	15–25	25–45	45–65	65 & up
Typhoid Group	—	—	—	—	—	—	—	—	—
Whooping Cough	2	—	1	1	—	—	—	—	—
Encephalitis Lethargica	1	—	—	—	—	—	1	—	—
Tetanus Neonatorum	1	1	—	—	—	—	—	—	—
Influenza	3	1	—	—	—	—	—	1	1
Puerperal Conditions	3	—	—	—	—	1	2	—	—
Diarrhœa and Enteritis	12	7	—	—	1	—	—	2	2
T.B. Lungs	37	—	—	—	—	5	24	8	—
Tuberculous Meningites	5	—	—	2	2	1	—	—	—
Other Tuberculous Diseases	5	—	—	—	—	1	4	—	—
Malignant Diseases	86	—	—	—	—	1	6	35	44
Diseases of Blood	2	—	—	—	—	—	1	1	—
Diabetes	8	—	—	—	—	—	—	4	4
Bronchitis	48	—	—	—	1	—	2	5	40
Broncho-Pneumonia	13	5	1	—	—	—	—	3	4
Pneumonia	29	—	—	1	—	—	9	9	10
Other Respiratory Diseases	10	—	—	—	1	—	1	2	6
Cerebral Hœmorrhage	58	—	—	—	—	—	1	11	46
Heart Diseases	116	—	—	—	—	1	2	29	84
Arterio-Selerosis	23	—	—	—	—	—	—	3	20
Appendicitis	6	—	—	—	—	1	1	2	2
Other Intestinal Diseases	23	1	—	—	—	1	3	4	14
Alcoholism and Cirrhosis	6	—	—	—	—	—	2	4	—
Nephritis	18	—	—	1	1	—	2	5	9
Congenital Malformations, etc.	28	26	1	—	1	—	—	—	—
Violent Deaths ex-Suicide	24	—	1	—	1	5	8	4	5
Suicide	5	—	—	—	—	—	1	3	1
Other Defined Diseases	120	1	—	1	—	1	3	17	97
Ill Defined Diseases	8	—	—	—	1	—	1	5	1
	700	42	4	6	9	18	74	157	390

TABLE V.

BACTERIOLOGICAL TABLE.

Nature of Specimen.	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Totals.
Sputum Negative	184	232	164	139	719
Sputum T.B.	329	407	334	301	1371
Sputum Blasto	76	77	72	45	270
Sputum Mixed	35	49	38	32	154
Urine Chemical	22	29	30	28	109
Urine Bacteriological ...	31	36	51	41	159
Swabs Throat	26	35	44	45	150
Swabs Nasal	6	6	5	6	23
Swabs Eye	1	1	—	—	2
Pus.	10	11	11	14	46
Fœces Bacteriological ..	10	13	27	12	62
Fœces for Parasites......	1	—	—	1	2
Blood Counts	4	4	3	3	14
BloodSmearsdifferential	1	2	3	3	9
Blood Widal	—	2	—	1	3
Blood films parasites ...	1	—	—	1	2
Milk	7	3	16	3	29
Water	15	14	15	28	72
Miscellaneous	6	10	16	10	42
	765	931	829	713	3238

LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE
LIBRARY
-7 SEP 1943

SCHOOL OF HYGIENE & TROPICAL MEDICINE LONDON
LIBRARY
-7 SEP 1943